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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,082	05/29/2001	Kazuhiro Okamoto	2803.65577	6025
24978	7590	02/09/2005	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			QI, ZHI QIANG	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/867,082

**Applicant(s)**

OKAMOTO ET AL.

**Examiner**

Mike Qi

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Claims 6 and 11 have been amended and new claim 13 has been added.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,104,451 (Matsuoka et al) in view of US 6,024,335 (Min).

Claim 6, Matsuoka discloses (col.8, line 24 – col.9, line 15; col.12, lines 34- col.13, line 12; Figs.1-4) that a liquid crystal display device comprising:

- liquid crystal panel (120);
- light source unit (fluorescent lamp 150);
- housing (50);
- frame (such as top frame 110, middle frame 130, bottom frame 140) in the housing (50) for supporting the liquid crystal panel (120) and the light source unit (150) as a liquid crystal display unit (100) (the display unit 100 having the frames installed in the housing 50; and the front case 1010 and the rear case 1020 also function as a housing); (that is an evidence, because the liquid crystal display panel must have frame to hold the liquid crystal material;

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otherwise the liquid crystal material can not be constitute it as a panel by liquid crystal itself);

- mechanism (400 and 210) attached to the second enclosure (220) which is a box shaped structure and attached to the liquid crystal unit 100 (see col.4, lines 55-67 and Fig.2), so that the mechanism (400 and 210) would be indirectly contact the frames (the frame holding the liquid crystal panel) in the housing for changing an angle of a display surface of the liquid crystal panel (tilted in a range from 5 forward to 20 backward which means the changing angles; see col.8, lines 41-43).

Matsuoka does not explicitly disclose that the mechanism is a hinge mechanism and the hinge mechanism including a supporting member and a connecting member rotatably supported by the supporting member by a hinge shaft, and the connecting member being connected to the frame.

However, Min discloses (col.4, line 39 – col.5, line 19; Figs.4-8) that using hinge mechanism (40) joints the LCD (10) and stand (20), and the hinge mechanism (40) having hinge body (41) in which the second bracket (51) functions as the supporting member and the first bracket (50) functions as the connection member rotatably supported by the supporting member by a hinge shaft (horizontal shaft 52 having horizontal axis 54). Min described (col.4, lines 46-51; Fig.4) that the first bracket (50) is fixed at the bottom interior side of the rear case (13) coupling the LCD (10) with the hinge mechanism (40), so that the connecting member is indirectly connected to a frame holding the LCD panel and also supporting the LCD panel. Min indicates (col.4,

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line 57-col.5, line 18) that such hinge mechanism enables forward and backward adjustment of the display using the forward and backward rotation unit for rotation whereby rotation of the LCD around the horizontal shaft and enabling a user to freely control the viewing angle and that is improved stand design.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to use a hinge mechanism attached to a frame for changing an angle of a display surface of the LCD panel as claimed in claim 6 for enabling forward and backward adjustment of the display and enabling a user to freely control the viewing angle.

Claim 10, Matsuoka discloses (col.8, lines 24- 43; Figs.1-4) that a mechanism (400 and 210) having a tilt mechanism (tilted in a range from 5 forward to 20 backward which means the changing angles; see col.8, lines 41-43) that means changing the angle of a display surface of the liquid crystal panel, and that is a self-standing device.

Claims 11-12, Matsuoka discloses (col.4, lines 5-8; col.6, lines 36-52; Figs.2 and 7-8) that a board (20) for driving and controlling the liquid crystal unit (100), i.e., a circuit board for driving the liquid crystal panel, and the circuit board (20) being attached to a back side of the frame (such as the second enclosure '220') (see Fig.2); and a shield panel (231) covers the circuit board (20), i.e., a shield cover covers the circuit board.

3. Claims 7, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka and Min as applied to claims 6, 10-12 above, and further in view of JP 7-56516.

Claim 7, lacking limitation is such that the mechanism is attached to a back surface section of the liquid crystal display unit.

However, JP 7-56516 discloses (abstract and Fig.3) that the tilt mechanism (13) is provided on (attached to) the back surface side of the display panel (22), and such mechanism facilitates the adjustment of an angle of elevation in a self-standing display device.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to arrange a liquid crystal display device having a mechanism as claimed in claim 7 to facilitate the adjustment of an angle of elevation in a self-standing display device.

Claim 9, Matsuoka discloses (Fig.1) that a portion of the back surface section of the liquid crystal display unit (100) is substantially parallel to the display surface (such as the display screen '101') of the liquid crystal display unit (100).

Claim 13, lacking limitation is such that the connection member has a portion which extends parallel to the supporting member when the LCD panel in a vertical position.

However, Min discloses (col.4, line 39 – col.5, line 19; Figs.4-8) that using hinge mechanism (40) joints the LCD (10) and stand (20), and the hinge mechanism (40) having hinge body (41) in which the second bracket (51) functions as the supporting member and the first bracket (50) functions as the connection member rotatably supported by the supporting member by a hinge shaft (horizontal shaft 52 having horizontal axis 54), and the first bracket (50) (connecting member) has a portion

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(because it is L-shape) which extends parallel to the second bracket (51) (supporting member) when the LCD panel in a vertical position. Min indicates (col.4, line 57-col.5, line 18) that such hinge mechanism enables forward and backward adjustment of the display using the forward and backward rotation unit for rotation whereby rotation of the LCD around the horizontal shaft and enabling a user to freely control the viewing angle and that is improved stand design.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to use such connection member as claimed in claim 6 for enabling forward and backward adjustment of the display and enabling a user to freely control the viewing angle.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka and Min as applied to claims 6 and 10-12 above, and further in view of US 6,216,989 (Shioya et al).

Claim 8, lacking limitation is such that the frame has a screw hole for attaching the mechanism.

However, Shioya discloses (col.9, line 53 - col.11, line 49; Figs 2-5) that using tilting member (7) (display holder, i.e., a frame to hold the display unit) having screw hole (7c) for attaching the tilt mechanism (10). Shioya indicates (col.11, lines 41-49) that the display unit can be easily mounted on and detached from the support structure.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to use screw hole to attach a frame with the mechanism as claimed

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in claim 8 for achieving the display unit being easily mounted on and detached from the support structure.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 6-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299.

The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi  
January 21, 2005

  
TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER